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detecting at least one of scattered and reflected light from a surface of said semiconductor wafer by multiple light optics having different detecting angles, respectively, relative to an incident light; and

determining a type and approximate shape of an occurrence associated with said semiconductor wafer based on a ratio of light intensities from said multiple light optics.

22. The method according to claim 21, wherein a laser surface inspection apparatus having at least two optics relative to one incidence is used to detect the at least one of scattered and reflected light.

23. The method according to claim 21, wherein said semiconductor wafer comprises an epitaxial semiconductor wafer.

24. The method according to claim 21, wherein the type and approximate shape of an occurrence associated with said semiconductor wafer is determined depending on a combination of A, B, and A/B, where light intensity from a high-angle light optic is A and light intensity from a low-angle light optic is B.

25. The method according to claim 21, wherein the type and approximate shape of an occurrence associated with said semiconductor wafer is determined depending on a combination of A, B, and A/B, where standard particle conversion size of a light point defect detected in a high-angle light optic is A and standard particle conversion size of a light point defect detected in a low-angle light optic is B.

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26. The method according to claim 21, wherein the type and approximate shape of an occurrence associated with said semiconductor wafer is determined based upon the following table

<b>Relations between A and B or ranges</b>	<b>Actual types</b>
<b><math>A \geq B \times 1.13</math></b>	<b>Stacking Fault</b>
<b><math>A &lt; B \times 1.13</math></b>	<b>Non-epi-layer originated extraneous substance (adherent particle)</b>
<b><math>B &lt; 90 \text{ nm}</math> and <math>A &gt; 107 \text{ nm}</math></b>	<b>Micro-crystallographic-defect (hillock, shadow, dislocation)</b>
<b><math>B &gt; 160 \text{ nm}</math> and <math>A &lt; 107 \text{ nm}</math></b>	<b>Abnormal growth (large-pit, projection)</b>
<b>Others</b>	<b>Abnormal product</b>

where standard particle conversion size of a light point defect detected in a high-angle light optic is A and standard particle conversion size of a light point defect detected in a low-angle light optic is B.

27. The method according to claim 21, wherein said semiconductor wafer comprises a mirror-finished semiconductor wafer.

28. The method according to claim 27, wherein the type and approximate shape of an occurrence associated with said semiconductor wafer is determined depending on a combination of A, B, and A/B, where light intensity from a high-angle light optic is A and light intensity from a low-angle light optic is B.

29. The method according to claim 27, wherein the type and approximate shape of an occurrence associated with said semiconductor wafer is determined depending on a combination of A, B, and A/B, where standard particle conversion size of a light point

defect detected in a high-angle light optic is A and standard particle conversion size of a light point defect detected in a low-angle light optic is B.

30. The method according to claim 27, wherein the type and approximate shape of an occurrence associated with said semiconductor wafer is determined based upon the following table

Relations between A and B or ranges	Actual types
$A \geq B \times 1.13$ or $B < 90 \text{ nm}$ and $A > 107 \text{ nm}$	Scratch, flaw, and shallow pit
$A < B \times 1.13$	Adherent particle or COP
$B \geq 85 \text{ nm}$ and $A < 107 \text{ nm}$	Grown-in defect in bulk near surface

where standard particle conversion size of a light point defect detected in a high-angle light optic is A and standard particle conversion size of a light point defect detected in a low-angle light optic is B.

31. The method according to claim 21, wherein the type and approximate shape of an occurrence associated with said semiconductor wafer is determined based upon the following table

Relations between A and B or ranges	Actual types
$A \geq B \times 1.13$ or $B < 90 \text{ nm}$ and $A > 107 \text{ nm}$	Scratch, flaw, and shallow pit
$A < B \times 1.13$	Adherent particle or COP
$B \geq 85 \text{ nm}$ and $A < 107 \text{ nm}$	Grown-in defect in bulk near surface

where standard particle conversion size of a light point defect detected in a high-angle light optic is A and standard particle conversion size of a light point defect detected in a low-angle light optic is B.

32. A method for inspecting a semiconductor wafer surface, comprising:  
scanning a semiconductor wafer with a laser beam;  
detecting at least one of scattered and reflected light from a surface of said semiconductor wafer by multiple light optics having different detecting angles, respectively, relative to an incident light;  
from a difference in standard particle conversion sizes of a light point defect based on a ratio of light intensities from said multiple light optics, calculating one of  
(i) a difference between a horizontal length and a vertical height of a light point defect present on a surface of said semiconductor wafer, and  
(ii) a difference between two orthogonal horizontal lengths of a light point defect present on a surface of said semiconductor wafer; and  
determining a type and approximate shape of an occurrence associated with said semiconductor wafer.

33. The method according to claim 32, wherein a laser surface inspection apparatus having at least two optics relative to one incidence is used to detect the at least one of scattered and reflected light.

34. The method according to claim 33, wherein said semiconductor wafer comprises an epitaxial semiconductor wafer.

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35. The method according to claim 33, wherein the type and approximate shape of an occurrence associated with said semiconductor wafer is determined depending on a combination of A, B, and  $A/B$ , where light intensity from a high-angle light optic is A and light intensity from a low-angle light optic is B.

36. The method according to claim 33, wherein the type and approximate shape of an occurrence associated with said semiconductor wafer is determined depending on a combination of A, B, and  $A/B$ , where standard particle conversion size of a light point defect detected in a high-angle light optic is A and standard particle conversion size of a light point defect detected in a low-angle light optic is B.

37. The method according to claim 32, wherein said semiconductor wafer comprises an epitaxial semiconductor wafer.

38. The method according to claim 32, wherein the type and approximate shape of an occurrence associated with said semiconductor wafer is determined depending on a combination of A, B, and  $A/B$ , where light intensity from a high-angle light optic is A and light intensity from a low-angle light optic is B.

39. The method according to claim 32, wherein the type and approximate shape of an occurrence associated with said semiconductor wafer is determined depending on a combination of A, B, and  $A/B$ , where standard particle conversion size of a light point defect detected in a high-angle light optic is A and standard particle conversion size of a light point defect detected in a low-angle light optic is B.

40. The method according to claim 32, wherein the type and approximate shape of an occurrence associated with said semiconductor wafer is determined based upon the following table

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<b>Relations between A and B or ranges</b>	<b>Actual types</b>
$A \geq B \times 1.13$	<b>Stacking Fault</b>
$A < B \times 1.13$	<b>Non-epi-layer originated extraneous substance (adherent particle)</b>
$B < 90 \text{ nm}$ and $A > 107 \text{ nm}$	<b>Micro-crystallographic-defect (hillock, shadow, dislocation)</b>
$B > 160 \text{ nm}$ and $A < 107 \text{ nm}$	<b>Abnormal growth (large-pit, projection)</b>
<b>Others</b>	<b>Abnormal product</b>

where standard particle conversion size of a light point defect detected in a high-angle light optic is A and standard particle conversion size of a light point defect detected in a low-angle light optic is B.

41. The method according to claim 32, wherein said semiconductor wafer comprises a mirror-finished semiconductor wafer.

42. The method according to claim 41, wherein the type and approximate shape of an occurrence associated with said semiconductor wafer is determined depending on a combination of A, B, and A/B, where light intensity from a high-angle light optic is A and light intensity from a low-angle light optic is B.

43. The method according to claim 41, wherein the type and approximate shape of an occurrence associated with said semiconductor wafer is determined depending on a combination of A, B, and A/B, where standard particle conversion size of a light point

defect detected in a high-angle light optic is A and standard particle conversion size of a light point defect detected in a low-angle light optic is B.

44. The method according to claim 41, wherein the type and approximate shape of an occurrence associated with said semiconductor wafer is determined based upon the following table

Relations between A and B or ranges	Actual types
$A \geq B \times 1.13$ or $B < 90 \text{ nm}$ and $A > 107 \text{ nm}$	Scratch, flaw, and shallow pit
$A < B \times 1.13$	Adherent particle or COP
$B \geq 85 \text{ nm}$ and $A < 107 \text{ nm}$	Grown-in defect in bulk near surface

where standard particle conversion size of a light point defect detected in a high-angle light optic is A and standard particle conversion size of a light point defect detected in a low-angle light optic is B.

45. The method according to claim 32, wherein the type and approximate shape of an occurrence associated with said semiconductor wafer is determined based upon the following table

Relations between A and B or ranges	Actual types
$A \geq B \times 1.13$ or $B < 90 \text{ nm}$ and $A > 107 \text{ nm}$	Scratch, flaw, and shallow pit
$A < B \times 1.13$	Adherent particle or COP
$B \geq 85 \text{ nm}$ and $A < 107 \text{ nm}$	Grown-in defect in bulk near surface

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where standard particle conversion size of a light point defect detected in a high-angle light optic is A and standard particle conversion size of a light point defect detected in a low-angle light optic is B.

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